302 KAR 27:050. Certification.

RELATES TO: KRS Chapter 217B, 7 U.S.C. 136 STATUTORY AUTHORITY: KRS 217B.050, 217B.060

NECESSITY, FUNCTION, AND CONFORMITY: KRS 217B.050 requires the Department of Agriculture to promulgate administrative regulations to implement the provisions of KRS Chapter 217B. KRS 217B.060 authorizes the department to establish classifications of pesticide licenses. This administrative regulation establishes a system of certification for persons required to be licensed or certified under KRS Chapter 217B.

Section 1. Applicability. (1) A person shall not be licensed to sell or apply pesticides unless he is certified in a category consistent with the sale or application. A person shall not purchase restricted use pesticides unless he is licensed or certified in a category consistent with the purchase.

- (2) A pesticide operator, pesticide applicator, noncommercial applicator, or private applicator shall not apply any pesticide unless he is certified in a category consistent with the application, as provided in this administrative regulation, with the exception of a registered trainee acting under the direct on the job supervision of a certified person.
- (3) The department may, after payment of all applicable fees, waive the certification requirement and issue a license to any person who holds a valid license in another state if the person is employed by a dealer registered in Kentucky and if, in the opinion of the department, the other state's requirements are substantially similar to that of Kentucky and the other state agrees to reciprocate with Kentucky.

Section 2. Certification. Certification under this administrative regulation may be obtained from the department as a private applicator pursuant to Section 7 of this administrative regulation; category-specific certification may be obtained in the following categories of pesticide use or application:

- (1) Category 1. Agricultural pest control. This category shall include:
- (a) Plant and animal. This category shall include persons applying or supervising the application of pesticides in production of agricultural commodities including, but not limited to, tobacco, peanuts, cotton, feed grains, soybeans and forage, vegetables, small fruits, tree fruits and nuts, and on grasslands, noncrop agricultural lands, and greenhouses, and the application of pesticides on animals including, but not limited to, beef cattle, dairy cattle, swine, sheep, horses, goats, poultry, and livestock, and to places on or in which animals are confined. Doctors of veterinary medicine engaged in the business of applying pesticides for hire, publicly holding themselves out as pesticide applicators or engaged in large-scale application of pesticides, shall be included in this category.
- (b) Agricultural fumigation. This category shall include the application of pesticide gases or fumigants in an enclosed area used for the production, storage, or transportation of agricultural commodities or to the contents of any structure used for the production, storage, or transportation of agricultural commodities; and any other application of a pesticide gas or fumigant in preparing land for production or in controllings pests in growing agricultural commodities, whether the agricultural commodities are indoors or outdoors.
- (2) Category 2. Forest pest control. This category shall include persons applying or supervising the application of restricted use pesticides in forests, forest nurseries, and forest seed-producing areas.
- (3) Category 4. Seed treatment. This category shall include persons applying or supervising the application of pesticides on seeds.

- (4) Category 5. Aquatic pest control. This category shall include persons applying or supervising the application of any pesticide purposefully applied to standing or running water, excluding applicators engaged in public health-related activities included in 302 KAR 29:060, Section 1(2).
- (5) Category 6. Right-of-way pest control. This category shall include persons applying or supervising the application of pesticides in the maintenance of public roads, electric power lines, pipelines, railway rights-of-way, or other similar areas.
- (6) Category 9. Regulatory pest control. This category shall include state, federal, or other governmental employees who apply or supervise the application of pesticides in the control of regulated pests.
- (7) Category 10. Demonstration and research pest control. This category shall include individuals who demonstrate to the public the proper uses and techniques of applying pesticides or supervise the demonstration. Included in this group shall be persons such as extension specialists and county agents, individuals demonstrating methods used in public programs, and persons conducting field research with pesticides, and in so doing, apply or supervise the application of pesticides. This group shall include state and federal employees and other persons conducting field research on pesticides.
- (8) Category 11. Aerial. This category shall include persons applying pesticides to lands of another using aircraft.
- (9) Category 12. Pesticide sales agent. This category shall include any individual who sells or distributes restricted use pesticides or any individual who sells and makes recommendations for the use and application of pesticides to the final user. Category 12 certification as a pesticide sales agent under this regulation shall meet the requirements of Category 12 certification under 302 KAR Chapters 28 and 29. Persons taking orders or explaining service programs without naming or making recommendations for pesticide use shall be excluded from certification, if the person selling or distributing pesticides is licensed as a pesticide sales agent.
- (10) Category 13. Antifouling marine paint. This category shall include persons who apply paint mixed with a pesticide to prevent the growth of pests, both plant and animal, to a product to be used in lakes, rivers, and waterways.
- (11) Category 14. Pest control consultant. This category shall include persons, who for a fee, offer or supply technical advice, supervision, or aid, or recommend the use of specific pesticides for the purpose of controlling insect pests, plant diseases, weeds, and other pests.
- (12) Category 15. Antimicrobial pest control. This category shall include persons who apply pesticides to control bacteria, mold, or fungi to or through any medium. Water and wastewater treatment plant operators shall be included in this category. Homeowners applying pesticides to personal swimming pools and persons certified in Category 1 of this chapter shall be excluded from this category.
- (13) Category 16. Sewer root control. This category shall include persons who apply pesticides into a sewer or sewer system to control the ingress of roots or any other blockage of the system.
- (14) Category 17. Wood preservatives. This category shall include persons who apply pesticides to wood and wood products to protect from wood-destroying organisms. Excluded from this category shall be persons engaged in structural pest control pursuant to 302 KAR Chapter 29.
- Section 3. General Requirements. (1) To obtain certification, a person shall take and pass, with a minimum score of seventy (70) percent, a certification examination in the category or categories in which certification is requested. Competency in the use and handling of pesticides shall be determined and based upon standards established in Sections 4 and 5 of this administrative regulation. The examination and testing shall include the general standards ap-

plicable to all categories and the additional standards specifically identified for each category or subcategory in which a person desires to be certified. A person shall pay an initial certification examination fee of twenty-five (25) dollars. For persons testing in multiple categories, there shall be an additional examination fee of ten (10) dollars for each additional category. Examination fees shall be charged each time a person takes a certification examination and shall be charged regardless of the passing or failing of the examination. Upon successfully passing an examination, a person shall have ninety (90) days from the date of testing to activate the licenses requested. After ninety (90) days have expired, a person shall have to retake and pass the examination before activation of a license may occur.

- (2) If an applicant provides a copy of a valid Kentucky-certified crop advisor certification to the department, the examination for a consultant license shall be waived.
- Section 4. General Standards of Competency. Testing shall be based on examples of problems and situations appropriate to the particular category or subcategory of the requested certification and may include the following areas of competency:
 - (1) Label and labeling comprehension:
- (a) An understanding of instructions, warnings, terms, symbols, and other information commonly appearing on pesticide labeling;
 - (b) Classification of the product, general or restricted; and
 - (c) Necessity for use consistent with the labeling.
 - (2) Safety factors, including:
 - (a) Pesticide toxicity, hazard to man and common exposure routes;
 - (b) Common types and causes of pesticide accidents;
- (c) Precautions necessary to guard against injury to applicator and other individuals in or near treated areas;
 - (d) Symptoms of pesticide poisoning;
 - (e) First aid and other procedures to be followed if a pesticide accident occurs;
- (f) Proper identification, storage, transport, handling, mixing procedures, and disposal methods for pesticides and used pesticide containers, including precautions to be taken to prevent children from having access to pesticide containers;
- (g) Practical application of the Worker Protection Standards, 40 CFR 156 and 170, FIFRA; and
- (h) The proper selection and use of personal protective equipment for handling and application of pesticides.
- (3) The potential environmental consequences of use and misuse of pesticides as may be influenced by factors such as:
 - (a) Weather and other climatic conditions;
 - (b) Types of terrain, soil, or other substrata;
 - (c) Presence of fish, wildlife, and other nontarget organisms;
 - (d) Drainage patterns;
 - (e) Storage or use of pesticides and fertilizer including bulk fertilizer or pesticide;
 - (f) Other nonchemical controls including, but not limited to, sanitation.
 - (4) Pest identification, including consideration of the following factors:
- (a) Common features of pest organisms and characteristics of damage necessary to facilitate pest recognition; and
- (b) Pest maturation and development as it may relate to the problem of identification and control.
 - (5) Pesticides, including consideration of the following factors:
 - (a) Types of pesticides;

- (b) Types of pesticide formulations;
- (c) Compatibility, synergism, persistence, and animal and plant toxicity of the formulation;
- (d) Hazards and residues associated with use;
- (e) Factors which influence effectiveness or lead to such problems as resistance to pesticides; and
 - (f) Dilution procedures.
 - (6) Equipment, including consideration of the following factors:
 - (a) Types of pesticide application equipment and advantages and limitations of each; and
 - (b) Uses, maintenance, and calibration of equipment.
 - (7) Application techniques, factors including:
- (a) Methods used to apply various formulations of pesticides, solutions, and gases together with a knowledge of which technique or application to use in a given situation;
- (b) Relationship of discharge and placement of pesticides to proper use, unnecessary use, and misuse; and
 - (c) Prevention of drift and pesticide loss into the environment.
- (8) Laws and regulations. Knowledge of pertinent aspects of the Federal Environmental Pesticides Control Act, 7 USC 136, and KRS Chapter 217B.

Section 5. Specific Standards of Competency. In addition to meeting the requirements of Sections 3 and 4 of this administrative regulation, persons requesting certification for a specific category shall demonstrate competence relating to that category as follows:

- (1) Category 1. Agricultural. This category shall be subdivided as follows:
- (a) Plant and animal. Persons requesting agricultural plant and animal certification shall demonstrate practical knowledge of crops and specific pests of those crops for which they may be using pesticides. Practical knowledge shall be required concerning soil and water problems, preharvest intervals, reentry intervals, phytotoxicity, potential for environmental contamination, nontarget injury, and community problems resulting from the use of pesticides in agricultural areas. They shall demonstrate practical knowledge of agricultural animals and their associated pests. A practical knowledge shall also be required concerning specific pesticide toxicities and residue potentials since host animals will frequently be used for food. Further, the person shall know the relative hazards associated with such factors as formulation, application techniques, age of animals, stress, and extent of treatment.
- (b) Agricultural fumigation. This category shall include persons requesting agricultural fumigation certification. They shall demonstrate practical knowledge of the use of pesticide gases and fumigants in the treatment of enclosed areas used for the production, storage, or transportation of agricultural commodities and the use of pesticide gases and fumigants in preparing land for the production of agricultural commodities and for the control of pests in growing agricultural commodities.
- (2) Category 2. Forestry. Persons requesting forest certification shall demonstrate practical knowledge of types of forests, forest nurseries, seed production in the Commonwealth, and the pests involved therein. They shall possess practical knowledge of the cyclic occurrence of certain pests and their specific population dynamics as a basis for programming pesticide applications. A practical knowledge shall be required of the relative biotic agents and their vulnerability to the pesticides to be applied. Because forest stands may be large and frequently include natural aquatic habitation and harbor wildlife, the consequences of pesticide use may be difficult to assess. The applicator shall, therefore, demonstrate practical knowledge of control methods which will minimize the possibility of secondary problems such as unintentional effects on wildlife. Proper use of specialized equipment shall be demonstrated, especially as it may relate to meteorological factors and adjacent land use.

- (3) Category 4. Seed treatment. Persons requesting seed treatment certification shall demonstrate practical knowledge of the types of seeds that require chemical protection against pests and factors such as seed coloration, carriers, and surface active agents which influence pesticide binding and may affect germination. They shall demonstrate practical knowledge of the hazards associated with handling, sorting, mixing, misuse of treated seed such as introduction of treated seed into food and feed channels, and proper disposal of unused treated seeds.
- (4) Category 5. Aquatic. Persons requesting aquatic certification shall demonstrate practical knowledge of the secondary effects which can be caused by improper application rates, incorrect formulations, and faulty application of pesticides used in this category. They shall demonstrate practical knowledge of various water-use situations and potential pesticide effects on plants, fish, birds, beneficial insects, and other organisms which may be present in aquatic environments. They shall also demonstrate practical knowledge of the principles of limited-area application.
- (5) Category 6. Right-of-way. Persons requesting right-of-way certification shall demonstrate practical knowledge of a wide variety of environments since rights-of-way can traverse many different terrains, including waterways. They shall demonstrate practical knowledge of problems of run-off, drift, excessive foliage destruction, and the ability to recognize target organisms. They shall also demonstrate practical knowledge of the nature of herbicides, the need for containment of these pesticides within the right-of-way area, and the impact of their application activities upon the adjacent areas and communities.
- (6) Category 9. Regulatory. Persons applying for certification in this category shall demonstrate practical knowledge of regulated pests, applicable laws relating to quarantine and other regulation of pests, and the potential impact on the environment of pesticides used in suppression and eradication programs. They shall demonstrate knowledge of factors influencing introduction, spread, and population dynamics of relevant pests. Their knowledge shall extend beyond that required by their immediate duties since their services are frequently required in other areas of the country where emergency measures are invoked to control regulated pests and where individual judgments must be made.
- (7) Category 10. Demonstration and research. Persons demonstrating the safe and effective use of pesticides to other persons and the public shall meet comprehensive standards reflecting a broad spectrum of pesticide use. Practical knowledge of problems, pests, and population levels occurring in each demonstration situation shall be required. Further, they shall demonstrate an understanding of pesticide-organism interactions and the importance of integrating pesticide use with other control methods. In general, persons conducting demonstration pest control work shall possess a practical knowledge of all of the standards detailed in this administrative regulation.
- (8) Category 11. Aerial certification. Persons applying pesticides using aircraft shall obtain aerial certification. Aerial applicators shall possess knowledge of aerial application equipment and calibration of that equipment, spray efficiency testing, field flight patterns, swath markings, turning procedures and subsequent considerations, awareness of obstacles and obstructions, personal safety of pilot, flagman, and ground crew, and preflight checklists of spray personnel. Persons obtaining certification in this category shall also be certified in at least one (1) other category of pesticide use as appropriate for their business.
- (9) Category 12. Pesticide sales agent. Persons desiring certification in this category shall demonstrate practical knowledge of pesticide labels and label comprehension including environmental hazards, rates of application, proper application techniques, storage, shipping, handling, worker protection safety issues, and the different types of pesticides.
- (10) Category 13. Antifouling marine paint. Persons desiring certification in this category shall demonstrate practical knowledge of the principles and practices of using antifouling paints, in-

cluding toxicity to humans and nontarget organisms via common exposure routes; proper cleaning, disposal and containment techniques; climatic factors that may influence environmental hazards; common types and features of target and nontarget aquatic/marine organisms; proper handling, mixing and application procedures; and the laws and regulations governing pesticides and antifouling paints.

- (11) Category 14. Pest control consultant. Persons desiring certification in this category shall demonstrate practical knowledge of soils, plant identification, pest identification, and soil fertility and have knowledge of pesticides for the purpose of controlling insect pests, plant diseases, weeds, and other pests.
- (12) Category 15. Antimicrobial pest control. Persons desiring certification in this category shall demonstrate practical knowledge of disinfecting, sanitation, reduction or mitigation of growth or development of microbiological organisms; protection of inanimate objects, industrial processes, systems or services, water, or other chemical substances from contamination, fouling, or deterioration caused by bacteria, virus, fungi, protozoa, algae, or slime. Water and wastewater treatment plant operators shall be included in this category. This category shall not include homeowners maintaining personal swimming pools.
- (13) Category 16. Sewer root control. Persons desiring certification in this category shall demonstrate practical knowledge of the safe handling and proper application of sewer root control chemicals, including practical knowledge of root growth and biology, equipment type and calibration procedures, proper pesticide handling, mixing and application procedures, proper use and maintenance of personal protective equipment, toxicity of root control pesticides to human and nontarget organisms via common exposure routes, proper cleaning, disposal and containment techniques, effects of root control pesticides on ground water, sewage treatment plants, septic tanks, holding tanks, lift stations, and other sewage treating, conveying, or handling equipment, environmental effects, factors that may lead to a hazardous condition, and the laws and regulations that cover pesticide use.
- (14) Category 17. Wood preservative. Persons desiring certification in this category shall demonstrate practical knowledge in the use of wood preservatives, air monitoring procedures, personal protective clothing and equipment, hygiene, related health and safety measures, emergency procedures, and practices necessary to prevent environmental contamination.

Section 6. Certification Maintenance. To maintain certification, each person certified under this administrative regulation, other than a private applicator, shall in any three (3) year period, attend at least twelve (12) continuing education units of training for a single category, approved by the department, in the use and application of pesticides. The training shall consist of nine (9) continuing education units of training based on Section 4 of this administrative regulation. For each additional category, in addition to the single category held by the person, an additional three (3) continuing education units based on Section 5 of this administrative regulation, shall be required. Nine (9) continuing education units of training based on Section 4 of this administrative regulation, shall be required to maintain certification regardless of how many additional categories a person may hold. Credit shall be given in full continuing education units only. All persons holding certification in any category on the effective date of this administrative regulation shall begin a new three (3) year training period beginning January 1 after the effective date of this administrative regulation. All certifications in effect on the effective date of this administrative regulation shall be renewed with an expiration date of December 31, 2005.

Section 7. Private Applicators. (1) Standards of certification of private applicators. Compliance with the following standards shall qualify a person for certification as a private applicator.

A private applicator may purchase, use, or apply pesticides in his capacity as a private applicator. As a minimum requirement for certification, a person who desires certification as a private applicator shall show that he possesses a practical knowledge of the pest problems and pest control practices associated with his agricultural operations, including but not limited to, proper storage, use, handling, and disposal of the pesticides and containers. This practical knowledge shall include the ability to:

- (a) Recognize common pests to be controlled and damage caused by them;
- (b) Read and understand the label and labeling information, including the common names of the pesticides, pests to be controlled, timing and methods of application, safety precautions, any preharvest and reentry restrictions, and specific disposal procedures;
- (c) Apply pesticides in accordance with label instructions and warnings, including the ability to prepare the proper concentration of pesticide to be used under particular circumstances, taking into account such factors as area to be covered, speed at which application equipment will be driven, and the quantity dispersed in a given period of operation;
- (d) Recognize local environmental situations that shall be considered during application to avoid contamination;
 - (e) Recognize poisoning symptoms and procedures to follow in case of a pesticide accident;
- (f) Demonstrate knowledge of the standards for the supervision of noncertified persons established by 40 CFR 171;
- (g) Understand the practical application of the Worker Protection Standards, 40 CFR 156 and 170. FIFRA:
- (h) Properly select and use personal protective equipment for handling and application of pesticides; and
- (i) Know and understand the standards and regulations for the storage of pesticides and fertilizer, including bulk fertilizer or pesticide.
- (2) Verification of competence. Competence of private applicators shall be verified by means of a training program administered by county extension agents. Audio-visual training shall be given accompanied by study of the private applicator training pamphlet. Included in the pamphlet shall be self-quizzes with answers to be used by the applicators to assess their own progress. Following completion of training, a certification competency statement shall be signed by the instructor and forwarded to the department or its designated representative. Certification credentials shall then be transmitted to the applicator by the department or its designated representative. Training shall be based on the "Core Manual" published by the United States Environmental Protection Agency. Private applicators may request a written competency test as an alternate means of certification. Private applicators shall be required to be recertified every three (3) years.

Section 8. Credentials. If a person meets all the requirements to obtain a category-specific license under KRS Chapter 217B and this administrative regulation, the department shall issue a document signifying that he is licensed and certified in the category for which he qualifies.

- (1) Inactive status. If an applicator or operator, for any reason, changes status and is no longer employed by a dealer but elects to maintain his license, he may do so by advising the department of the change and the reason for the change. The department shall then issue to that person a notification that his license will be held in inactive status. The license holder shall be required to maintain certification and pay the annual renewal fee. The licensee shall not be required to register as a dealer or be permitted to perform any type of regulated activity until the license is reactivated and properly assigned to a dealer.
- (2) Employee license and certification. An employee of the Kentucky Department of Agriculture employed after the effective date of this administrative regulation shall not obtain or maintain

any pesticide license or certification other than a noncommercial license or private applicator certification during the term of his employment with the department unless required by the department in the performance of his official duties. Any pesticide license other than a noncommercial license obtained by an employee prior to the effective date of this administrative regulation shall be placed in inactive status for the duration of his employment with the department unless required by the department in the performance of his official duties.

Section 9. Effective Date. The effective date of this administrative regulation shall be July 1, 2002. (28 Ky.R. 731; Am. 1365; eff. 12-19-2001.)